



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/994,755	11/28/2001	Akira Fukunaga	2001_1767A	8643

513 7590 06/12/2003

WENDEROTH, LIND & PONACK, L.L.P.
2033 K STREET N. W.
SUITE 800
WASHINGTON, DC 20006-1021

EXAMINER

THERKORN, ERNEST G

ART UNIT	PAPER NUMBER
----------	--------------

1723

10

DATE MAILED: 06/12/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/994755

Applicant(s)

FUKUNAGA

Examiner

THERKORN

Art Unit

1723

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136 (a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on MAY 30, 2003.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11; 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-9 is/are pending in the application.
- 4a) Of the above, claim(s) 1-4 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 5-9 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claims _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgement is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☐ All b) ☐ Some* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

*See the attached detailed Office action for a list of the certified copies not received.

- 14) ☐ Acknowledgement is made of a claim for domestic priority under 35 U.S.C. § 119(e).
a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgement is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s). _____
- 4) ☐ Interview Summary (PTO-413) Paper No(s). _____
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other:

Art Unit: 1723

Claims 8 and 9 are rejected under 35 U.S.C. 112, first paragraph, as containing subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention. No support for the subject matter of claims 8 and 9 can be found in the specification. Page 10, lines 11-14 of the specification would appear to indicate that ultraviolet adsorption and differential refraction are alternatives to use of an evaporative light scattering detector as opposed to techniques used in conjunction with an evaporative light scattering detector. As such, the claims are considered to be directed to new matter.

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 5 and 7-9 are rejected under 35 U.S.C. 103(a) as being unpatentable over either Eckles (U.S. Patent No. 4,326,940) or Heberling (PC FAB, August 1989, pages 72-84) in view of either O'Donohue (U.S. Patent No. 6,151,113) or Kibbey (U.S. Patent No. 5,670,054). At best, the claims differ from each of Eckles (U.S. Patent No. 4,326,940) and Heberling (PC FAB, August 1989, pages 72-84) in reciting use of an evaporative light scattering detector. O'Donohue (U.S. Patent No. 6,151,113) (column 1, lines 8-10 and lines 33-37) discloses evaporative light scattering detectors are highly sensitive liquid chromatography detectors used as concentration

Art Unit: 1723

detectors in many liquid chromatography techniques. Kibbey (U.S. Patent No. 5,670,054) (column 4, lines 14-58) discloses that an evaporative light scattering detector allows more efficient quantification than other HPLC mass-sensitive detectors. It would have been obvious to use an evaporative light scattering detector in each of Eckles (U.S. Patent No. 4,326,940) and Heberling (PC FAB, August 1989, pages 72-84) either because O'Donohue (U.S. Patent No. 6,151,113) (column 1, lines 8-10 and lines 33-37) discloses evaporative light scattering detectors are highly sensitive liquid chromatography detectors used as concentration detectors in many liquid chromatography techniques or because Kibbey (U.S. Patent No. 5,670,054) (column 4, lines 14-58) discloses that an evaporative light scattering detector allows more efficient quantification than other HPLC mass-sensitive detectors.

Claim 6 is rejected under 35 U.S.C. 103(a) as being unpatentable over either Eckles (U.S. Patent No. 4,326,940) or Heberling (PC FAB, August 1989, pages 72-84) in view of either O'Donohue (U.S. Patent No. 6,151,113) or Kibbey (U.S. Patent No. 5,670,054) as applied to claims 5 and 7-9 above, and further in view of either Heckenburg (U.S. Patent No. 5,279,972) or Gjerde (U.S. Patent No. 5,772,889). At best, the claim differs from either Eckles (U.S. Patent No. 4,326,940) or Heberling (PC FAB, August 1989, pages 72-84) in view of either O'Donohue (U.S. Patent No. 6,151,113) or Kibbey (U.S. Patent No. 5,670,054) in reciting removing ions. Heckenburg (U.S. Patent No. 5,279,972) (column 1, lines 12-14 and column 2, lines 35-45) discloses that it is desirable to remove unwanted ions prior to chromatographic separation. Gjerde (U.S. Patent No. 5,772,889) (column 3, lines 1-7) discloses that ions cause peak distortion

Art Unit: 1723

and removing them removes the problem. It would have been obvious to remove ions in either Eckles (U.S. Patent No. 4,326,940) or Heberling (PC FAB, August 1989, pages 72-84) in view of either O'Donohue (U.S. Patent No. 6,151,113) or Kibbey (U.S. Patent No. 5,670,054) either because Heckenburg (U.S. Patent No. 5,279,972) (column 1, lines 12-14 and column 2, lines 35-45) discloses that it is desirable to remove unwanted ions prior to chromatographic separation or because Gjerde (U.S. Patent No. 5,772,889) (column 3, lines 1-7) discloses that ions cause peak distortion and removing them removes the problem.

The remarks urge patentability based upon use of an evaporative light scattering detector. However, O'Donohue (U.S. Patent No. 6,151,113) (column 1, lines 8-10 and lines 33-37) discloses evaporative light scattering detectors are highly sensitive liquid chromatography detectors used as concentration detectors in many liquid chromatography techniques. Kibbey (U.S. Patent No. 5,670,054) (column 4, lines 14-58) discloses that an evaporative light scattering detector allows more efficient quantification than other HPLC mass-sensitive detectors. Accordingly, it would have been obvious to use an evaporative light scattering detector in each of Eckles (U.S. Patent No. 4,326,940) and Heberling (PC FAB, August 1989, pages 72-84) either because O'Donohue (U.S. Patent No. 6,151,113) (column 1, lines 8-10 and lines 33-37) discloses evaporative light scattering detectors are highly sensitive liquid chromatography detectors used as concentration detectors in many liquid chromatography techniques or because Kibbey (U.S. Patent No. 5,670,054) (column 4, lines 14-58) discloses that an evaporative light scattering detector allows more efficient quantification than other HPLC mass-sensitive detectors.

Art Unit: 1723

THIS ACTION IS MADE FINAL. Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the mailing date of this final action.

Any inquiry concerning this communication should be directed to E. Therkorn at telephone number (703) 308-0362.

**Ernest G. Therkorn
Primary Examiner
Art Unit 1723**

EGT/12
June 10, 2003